#### **ENVIRONMENTAL CHECKLIST**

# Purpose of Checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21 RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

# Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring the preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the question from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or to provide additional information reasonably related to determining if there may be significant adverse impact.

# Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (Part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

#### A. BACKGROUND

1. Name of proposed project, if applicable:

Nine Canyon Wind Project - Phase III.

This checklist addresses a proposed Windpower <u>Leasing action</u> covering two parcels owned by Washington State Department of Natural (DNR) Resources in Benton County. The area addressed and evaluated for leasing under this checklist is comprised of two parcels totaling about 340.05 acres. Subsequent permitting for the entire Phase III Project will be through the Benton County Planning Department. For more in-depth information relating to the Nine Canyon Wind Project — Phase III, contact Benton County Planning Department.

2. Name of applicant:

Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:

713 E. Bowers Rd. Ellensburg, WA 98926

Contact: Mark Bohnet, District Manager

Phone: (509) 925-8510.

4. Date checklist prepared:

November 15, 2006

5. Agency requesting checklist:

Washington State Department of Natural Resources (DNR)

6. Proposed timing or schedule (including phasing, if applicable

If the DNR leases the properties for wind power development of four (4)-2.3MW wind turbines, it expects the project will be operational by March 2008. Road construction is planned for the spring of 2007. Construction of the electrical connection components (substation and transmission lines) will likely occur in the summer of 2007 and wind turbine erection would commence in the fall of 2007.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No. This proposed project would be an expansion of the Nine Canyon Wind Project. The Nine Canyon Wind Project went operational September 2002 with 48.1 MWe of capacity from 37 wind turbines. Based on the operation and financial success of the project, a Phase II expansion (initially called the Zintel Canyon Wind Project) was developed with the addition of 12 turbines

with 15.6 MWe of capacity in December 2003. There are no plans for an expansion beyond this proposed third phase.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Information prepared explicitly for this project includes:

<u>Baseline Conditions and Impacts Analysis for Nine Canyon Phase III Wind Project,</u> by WEST, Inc., final report dated June 2006

Information prepared for the adjacent Phases I and II of the Nine Canyon Wind Project includes:

Archaeological Survey of Energy Northwest's Proposed Zintel Canyon Wind Project Extension, Benton County, Washington, by A. Gorman and J.C. Chatters, dated September 16, 2002

<u>Archaeological Survey of the Proposed Nine Canyon Wind Power Project, Benton County, Washington, by J.C. Chatters and E. Williams, dated June 22, 2001</u>

<u>Archaeological Survey of the Proposed Nine Canyon Wind Power Project, Benton County, Washington,</u> by R.M. Knight and J.C. Chatters, dated June 26, 2000

<u>Ecological Baseline Study for the Zintel Canyon Wind Project,</u> by WEST, Inc. and Northwest Wildlife Consultants, final report dated September 2002

<u>Wildlife Baseline study for the Nine Canyon Wind Project,</u> by WEST, Inc. and Northwest Wildlife Consultants, final report dated November 2001

Nine Canyon Wind Power Project Avian and Bat Monitoring Report, September 2002-August 2003, by WEST, Inc., dated October 2003

Nine Canyon Wind Project Phase II, Fall 2004 Avian and Bat Monitoring Study Report, by WEST, Inc. and Northwest Wildlife Consultants, report dated March 2005

Nocturnal Bird Migration at the Nine Canyon Wind Energy Project, Spring 2001, by ABR, Inc., December 2000 (results incorporated in <u>Wildlife Baseline Study</u> by WEST, Inc.)

<u>Nocturnal Bird Migration at the Nine Canyon Wind Energy Project, Spring 2001,</u> by ABR, Inc., September 2001 (results incorporated in <u>Wildlife Baseline Study</u>, by WEST, Inc., November 2001 September)

SEPA checklists for Nine Canyon Wind Project Prepared by Energy Northwest, dated March 30, 2001, December 6, 2001, and October 8, 2002

SEPA Mitigated Determination of Nonsignificance (File No. EA 01-24), prepared by Benton County Planning & Building Dept., dated May 22, 2001

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

We know of no other pending proposed projects that would affect the subject property.

10. List any government approvals or permits that will be needed for your proposal, if known.

For the act of leasing DNR property:

"Wind power" development lease.

SEPA Checklist for this action is required by DNR.

The following governmental approvals or permits are required for the entire Nine Canyon Wind Project Site:

A Conditional Use permit is required for construction and operation of the wind turbines. Building permits are required from Benton County for the structures on the project site. Opening an on-site rock quarry will require a mineral extraction permit from Benton County, and possibly, a wastewater permit from the Department of ecology. If the quarry and associated operations (rock crusher, stockpiles, parking area) will exceed applicable size and height thresholds (e.g., 3-acre footprint), a reclamation permit must be obtained from the Department of Natural Resources. Operation of a portable rock crusher and a concrete batch plan will require permits from the Benton Clean Air Authority. These operations will also likely require that an application be filed with the Department of Ecology for coverage under a general sand and gravel wastewater permit. Coverage under a general stormwater discharge permit will also be sought from the Department of Ecology. The Benton County Road Department would need to permit any junction of private project roads to the county roads. An aeronautical Study by the Federal Aviation Administration will be required to determine lighting requirements. An application would also be filed with the Bonneville Power Administration to permit connection to the power distribution grid.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agency may modify this form to include additional specific information on project description.)

This checklist addresses the proposed leasing of two DNR managed (Common School Trust) parcels for Wind Power development of four 2.3 megawatt wind turbines.

The following information relates to the entire Nine Canyon Wind Project Phases I, II, and III:

The project involves the expansion of the existing Nine Canyon Wind Project on privately (and publicly) owned land in Benton County, Washington. The project entails the construction and operation of up to 32 MWe of wind energy generation capacity that will be integrated into the existing 64-MWe Nine Canyon Wind Project Phases I & II. The four land leases for the project area, including Phase I & II, total about 7,740 acres although the occupied land will be a fraction of this total.

The project will consist of 14 to 25 wind turbines. The exact number is dependent on the several factors including turbine size (1,300kW to 2,300kW each), projected energy cost, and project output subscriptions. The turbine manufacturer and the number of turbines will be selected through a public bid process.

Turbines are mounted on freestanding tubular steel towers 200 to 265 feet tall. The turbines are driven by three rotor blades (with blades lengths of 100 to 150 feet) at rotation speeds of up to 30 revolutions per minute. The turbines will be deployed in two to five rows (or stings) with a tower-to-tower spacing of 500 to 750 feet.

The distribution and transmission facilities will include onsite 34.5-kV underground power collection cables between the wind turbines and the combined distribution feeder line. The feeder line between the turbines and the Nine Canyon substation will either be run underground or utilize the existing above ground facilities. A new transformer would be added to the Nine Canyon substation location about two miles east of the Phase III project. The existing interconnecting 115-kV output line from the substation to the local BPA 115-kV line is adequately sized for the Phase III output. No other transmission features are required.

One-lane gravel roads would be constructed along and between the tower strings to provide access from the existing Nine Canyon Wind Project for construction equipment and maintenance vehicles.

To provide material for construction of the project roads and tower footings, a small rock quarry will be developed on-site. Access to the quarry will be via a short (approx 100ft), dedicated haul road that connects directly to a turbine sting road.

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographical map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any applications related to this checklist.

The project lease sites are in Benton County, Washington approximately seven miles south of the central area of the City of Kennewick. The DNR parcel legal descriptions are:

All that portion of the West 1,010.0 feet of the N1/2 of the SW1/4 of Section 12, Township 7 North, Range 29 E. W.M., lying south of "Jump Off Joe Road" as described in auditors file no. 864531 and as shown on record survey no. 3254, records of Benton County, containing 20.05 acres and,

The W1/2 of Section 16, Township 7 North, Range 30 East, W.M., containing 320 acres more or less.

The general locations and topography of the parcels are shown in the attached maps.

#### **B. ENVIRONMENTAL ELEMENTS**

- 1. Earth
- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountains, other \_.

The sites are rolling with south to southwest facing slopes.

b. What is the steepest slope on the site (approximate percent slope)?

Estimated to be 10% slope.

c. What general types of soils (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The predominant surface soils on the sites are silt loams.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No evidence of unstable soils on these properties.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Fill will be required for construction of roads and the tower pad. This will be primarily crushed rock that will be produced from a quarry located on the Nine Canyon Project. For the entire Phase III project the estimated quantity of material is 20,000 cubic yards. Tower foundations will be constructed of concrete and will require an additional 3,000 cubic yards of sand and aggregate, assuming 25 wind turbines are erected. Material for producing the concrete in a temporary batch plant will be hauled from offsite sources. Alternatively, concrete will be mixed offsite and hauled to the project as was done during construction of Nine Canyon Phases I & II. Foundation preparation will result in about 6,000 cubic yards of spoil that will be used for road fill on the project site.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Excavation and stockpiling of rock material, construction of the roads, trenching for buried cables, and excavation for tower foundations create potential for soil erosion by water or wind.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The DNR sites will have less than 1%. The entire Nine Canyon Wind Project site (leased land area) totals about 8,087 acres. At full build-out, the impervious surfaces (tower pedestals and substation equipment) will total less than one (1) acre or less than 0.1% of the total area.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Construction vehicle traffic would be limited to improved road surfaces as much as possible. Excavations would be backfilled and compacted as soon as practical to minimize exposure to wind and rain. Water will be applied to construction surfaces susceptible to wind erosion. Water erosion in exposed areas of the rock quarry will be minimized by grading the excavation to divert water around the pit. Silt fences and straw bales may also be used to minimize erosion. Disturbed areas not used for operations will be graded and reseeded with wheat or native grasses, as appropriate.

# 2. <u>Air</u>

a. What types of emissions to the air would result from this proposal (i.e. dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Air emissions during construction would be minor and would consist of vehicle emissions and fugitive dust. Sources of dust include roads, rock quarry/crusher, and concrete batch plant. There should be no emissions during project operations except those attributable to infrequent vehicular traffic.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The primary method that will be employed to control fugitive dust will be the application of water to areas vulnerable to wind erosion during the construction phase. Dust from the rock crusher operation will be controlled with water sprays. If used, the portable concrete batch plant would be equipped with dust collecting filter bags.

#### 3. Water

#### a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There are no surface water bodies in the project construction area.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

N/A.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of the fill material.

N/A.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100 year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

#### b. Ground:

1) Will groundwater be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Groundwater from existing water rights and wells could be used during construction for dust control and concrete for turbine foundations but we won't know that until a lease is awarded and a plan of development is approved.

There will be no discharge to groundwater.

If water is used for any purpose on the project, the lessee will be responsible to ensure that

the use(s) are within the limitations of its water rights.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals . . ; agricultural; etc.). Describe the general size of the system, the number such systems, the number of houses to be served (if applicable), or the number animals or humans the system(s) are expected to serve.

Sanitary wastes during construction will be managed through portable toilets serviced by an offsite vendor. There will be no septic systems installed on State land.

- c. Water Runoff (including storm water):
  - 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Rainfall and snow melt are the only sources of runoff from the project sites. Water will flow to the existing drainages that dissect the area.

2) Could waste material enter ground or surface waters? If so, generally describe.

The nature of the project makes it unlikely that waste materials would enter either ground or surface water. No permanent surface watercourses are located on the site. The depth to groundwater is 100 feet or more. As necessary, before discharge to the soil, water from the concrete batch plant will be neutralized to within the groundwater pH standard. Waste materials that could pose a problem will not be discharged to the soil.

3) Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Erosion control measures (e.g., sediment control traps; straw check dams; silt fences; grading and reseeding disturbed areas) will be employed to minimize soil loss to runoff. Hazardous materials (e.g., paints, lubricants) will be controlled in closed containers; residuals will be disposed of offsite.

#### 4. Plants

a.	Check or circle types of vegetation found on the site:
	Deciduous tree: alder, maple, other
	evergreen tree: fir, cedar, hemlock, other
	X shrubs
	X grass
	pasture
	X crop or grain
	wet soil plants:
	water plants

other

b. What kind and amount of vegetation will be removed or altered?

In the project area located on the DNR properties, the current land use is dry land cereal grain production. The wind turbine and access road "foot-print" areas will be removed from cropland production. In the Phase III project area, vegetation removed for construction of roads, wind turbines, substations, and transmission line will be almost entirely dry land cereal grains (primarily wheat). The proposed rock quarry site is located in an area of shallow soils that support native range grasses and a few shrubs. For a 32-Mwe project with 25 turbines, the total area disturbed is estimated to be about thirty (30) acres, including about three acres for the quarry site. The quarry site will be restored after extraction activities are complete.

c. List threatened or endangered species known to be on or near the site.

The DNR TRAX records were reviewed. No listed threatened or endangered plant species are known to be on or near the DNR sites. Also, no listed threatened or endangered plant species were observed on or near the sites during Energy Northwest's field surveys.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

On the project area located on the DNR properties, the disturbed areas not used for wind turbine and road access will be reseeded for dry land crop production or with native grasses as appropriate. In the Phase III project area, disturbed cropland will be replanted with grain crops. The rock extraction site, will be seeded with native range grasses. Topsoil and overburden material at the quarry site and in other areas to be disturbed (portions of roadways) will be stockpiled to aid reclamation and revegetation.

#### 5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: common raven, horned lark, western meadowlark, swallow species, hawk species, falcon species, Canada goose, sandhill crane, others

mammals: badger, covotes, deer, bat species

fish: none

A detailed inventory of wildlife observed in the Nine Canyon Phase III project area is contained in <u>Baseline Conditions and Impact Analysis for Nine Canyon Phase III Project,</u> by WEST, Inc. and Northwest Wildlife Consultants, report dated June 2006. A copy can be obtained through contact with the Benton County Planning Department or Energy Northwest.

b. List any threatened or endangered species known to be on or near the site.

No listed threatened or endangered animal species are known to be on the DNR sites. For the Phase III project area, baseline studies (see item B.5.a) identified no listed threatened or endangered mammals in the project area. The review did identify the possible occurrence of four (4) mammal species (Yuma Myotis, Townsend's big-eared bat, blacktailed jackrabbit, white-tailed jackrabbit) that are classified as federal species of concern or state-listed candidate species. General field investigations disclosed no evidence that these species occupied the project area.

The initial review also identified six (6) federal or state listed birds (American white pelican, bald eagle, ferruginous hawk, peregrine falcon, sage grouse, and sandhill crane) as possibly occurring in the project area. Of these, only the ferruginous hawk (Buteoe regalis) and sandhill crane (Grusc Canadensis) were documented through field observation. Another seven (7) bird species that are designated as candidates for federal or state listed were identified as potentially occurring in the project area. Of these, the golden eagle (Aquila chrysaetos), merlin (Falco columbarius), vaux's swift (Chaetura vauxi), sage sparrow (amphispiza belli), and loggerhead shrike (lanius ludovicianus) were documented by field observations. Sightings of these species were very few in numbers.

# c. Is the site part of a migration route? If so, explain.

The Columbia River drainage in the vicinity of the DNR sites is a segment of the Pacific flyway, a migratory bird route. The wind power project site is over seven (7) miles from the river. Canada geese, a migrating and resident waterfowl, have been observed flying over the site area. Migrating passerines (songbirds) are also known to fly through the area. A night migration study, conducted in the Nine Canyon area in the fall of 2000, indicated low to moderate levels of migration in the project area.

# d. Proposed measures to preserve or enhance wildlife, if any.

Sensitive habitat areas will be mapped and identified to construction contractors to avoid disturbance. The four turbines located on DNR property will be placed in dry land wheat fields that have low perceived wildlife habitat value. For the Phase III project area, potential avian impacts are minimized with blade rotational velocities less than 30 rpms. Towers will be in tubular steel construction, not the lattice design that is more conducive to birds perching on towers. New overhead transmission structures are not anticipated for the Phase III expansion. Any such structures (34.5-kV and higher) located within one mile of a wind turbine will be equipped with anti-perching devices to discourage raptor perching. Transmission line design will use conductor spacing that minimizes the possibility of electrocutions of the primary raptor species on the project site.

A technical advisory committee (TAC) established for the Nine Canyon Wind Project will continue to provide oversight of the operation phase monitoring program for the project. The membership of the TAC includes resource agency staff, project landowners, Energy Northwest, and one or more members of the local Audubon chapter.

A wildlife mitigation agreement between Energy Northwest and the Washington Department of Wildlife has been established for the Nine Canyon Wind Project. It is expected that this agreement will be amended as needed to incorporate the Phase III expansion.

## 6. Energy and Natural Resources

a. What kinds of energy (electrical, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

This project will be a net generator of electrical energy, however during construction equipment would use gasoline and diesel fuel.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

N/A.

# 7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

None anticipated.

1) Describe any emergency services that might be required.

None anticipated.

2) Propose measures to reduce or control environmental health hazards, if any:

None. This project will not introduce environmental health hazards.

#### b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The project sites are in rural areas. DNR knows of no ambient noises that would affect this project.

2) What types and levels of noise would be created by or associated with the project on a short-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction activities would result in short-term noise impacts due to construction equipment (e.g., trucks, dozers, graders, cranes, portable generators). The hours of construction would likely be 7 a.m. to 6 p.m. and the duration of the construction activity is expected to be less than six (6) months in two segments (road and tower foundation construction in spring/summer 2007, turbine erection and electrical interconnection in fall/winter 2007). Construction related noise for the larger Stateline Wind Project in Walla Walla County was estimated to average 46 to 57 dBA at 2,500 feet. Measurements of background noise in two locations on the Stateline site yielded median sound pressures of 52 dBA. (Section 2.3 SEPA Final EIS for Stateline Wind Project, prepared by CH2M Hill, October 2000.)

Noise during project operation would come mainly from vortex shedding as the blades rotate through the air. Advances in turbine technology, including more efficient blade airfoils, have resulted in more of the wind energy being converted into rotational torque and less into acoustical noise than was the case with earlier designs. Low frequency noise would be most noticeable at low wind speeds (cut-in speed is approximately 8 mph); at higher wind speeds the turbine noise tends to be masked by the background sources. Measurements at the Vansycle Wind Project south of Touchet, Washington confirmed that the 660-kW turbines installed there met the design warranties (equivalent to 72 dBA at 50 feet with 18 mph wind) for that particular installation. (Section 2.3 SEPA Final EIS for Stateline Wind Project, prepared by CH2M Hill, October 200.) Experience at Stateline and at the Nine Canyon Phase I & II Wind Project has shown that individuals standing at a tower base in moderate wind have no difficulty communicating in normal conversational voice.

At the Nine Canyon Phase III Wind Project site there are no occupied residences within the project site. The nearest residential receptor outside the construction zone is approximately 6,500 feet from the nearest probably Phase III wind turbine location. This home is owned by a Nine Canyon Wind Project site landowner. Testing performed by the manufacturer of the turbine used at Nine Canyon Phases I & II indicate that sound is attenuated to under 40 dBA at a distance of 1,000 feet (Bonus 1.3 MW noise measurements at 10 m height in 18 mph wind, March 2000). This is comparable to background noise (Stateline SEPA Final EIS). Due to the separation distances, noise generated by the wind turbines is not expected to be discernible to residents.

3) Proposed measures to reduce or control noise impacts, if any:

No specific noise mitigation measures are planned. In instances of off-normal noise that can be attributed to mechanical failures (e.g., faulty gears, worn blade brakes, out-of-balance rotor), the turbine will be removed from service and repaired.

- 8. Land and Shoreline Use
- a. What is the current use of the site and adjacent properties?

The primary use of the DNR sites are dry land crop production. Other adjacent land uses include communication towers and facilities, wind turbines and dry land crop production.

b. Has the site been used for agriculture? If so, describe.

Yes. Dry land cereal grain production.

c. Describe any structures on the site.

None

- d. Will any structures be demolished? if so, what? N/A.
- e. What is the current zoning classification of the site?

GMA Agricultural District

f. What is the current comprehensive plan designation of the site?

GMA Agricultural District

g. If applicable, what is the current shoreline master program designation of the site?

N/A.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The DNR sites have not been designated as environmentally sensitive areas. Although no portion of the Phase III project area has been designated as an environmentally sensitive area, some shrub steppe habitat, which the Washington Department of Fish and Wildlife classifies as priority habitat, occurs in Zintel Canyon and on slopes within portions of the project area. Construction activities associated with the gravel quarry will impact some native habitat, but this area will be restored after the quarry operations are completed. Also, some portions of the property with steeper slopes and shallow soils have been leased to the Conservation Reserve Program.

i. Approximately how many people would reside or work in the completed project?

No person(s) will reside on the DNR State properties. On the Phase III project area, it's anticipated that operations and maintenance (O & M) personnel will reside in the Tri-Cities and neighboring communities. Operations and maintenance services for the proposed project would be provided by the existing Nine Canyon O & O organization that is based out of the Butler-type building on Nine Canyon Road. The incremental increase in staffing for the proposed project is estimated to be two fill-time equivalent technicians. Augmented maintenance crews would visit the site for specialized tasks.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

N/A.

1. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The wind energy project is compatible with current and projected land uses. Agricultural activity will only be displaced on the relatively small portion of land that is occupied by the wind turbine towers and service roads. No setback distance is required for farming.

# 9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

N/A.

# 10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

As explained in response to item A.11 above, structure heights will be determined by the wind turbine design, which is to be selected through a competitive procurement process. At the Nine Canyon Phase I & II Wind Project, turbine hub heights are 200 feet (60m) and the blade lengths will be about 148 feet (45m). Thus, the Phase III structure heights (to tip of rotor) would be about 410 feet. The towers will be smooth tubular steel with a maximum base flange diameter of approximately 15 feet. The blade material is a composite laminate fiberglass. In appearance, the new turbines will be very similar to the turbines deployed in Phase I & II.

b. What views in the immediate vicinity would be altered or obstructed?

Relative to other types of utility projects or industrial facilities, the wind turbines present clean, graceful lines. The spacing requirements are such that the towers appear dispersed upon the open landscape. Segments turbine springs erected for the Phase I & II project are visible throughout the Tri-Cities area, most notably from the communities of Finley, south Kennewick, and parts of Pasco. The proposed Phase III turbines, although taller, should be less noticeable because they will not be located on the higher levels of the Jump Off Joe ridgeline. No designated scenic areas or significant vistas would be within the line-of sight of the project.

c. Proposed measures to reduce or control aesthetic impacts, if any:

All of the turbine towers will be of uniform design with smooth tubular steel structures that are painted off-white to blend with the sky. Lighting will be limited to aircraft warning lights.

## 11. Light and Glare

a. What kind of light or glare will the proposal produce? What time of day would it mainly occur?

No daylight glare is expected from the tower and turbine rotor structures. It is anticipated that aircraft avoidance lighting will be required. This will likely consist of one or more strobe lights in the daytime and one or more red flashing lights at night on each tower string in compliance with FAA regulations.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

There will be no glare. The only lights will be those required to minimize aircraft safety hazards.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

#### 12. Recreation

a. What designated and informal recreation opportunities are in the immediate vicinity?

Bird watching and hunting (as permitted by landowners) may occur in the area.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Hunting in the vicinity of the wind turbines would be restricted to avoid damage from shot and bullets.

c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any:

None.

# 13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No.

b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site? If so, generally describe.

There are no known landmarks or structures of historic, archaeological, scientific, or cultural significance on the DNR properties or in the project site area. As listed in item A.8, archaeological surveys of the project area were conducted in 2001-2002 in conjunction with the Nine Canyon Phase II development.

c. Proposed measures to reduce or control impacts, if any:

None.

# 14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans if any.

The DNR sites can be reached from:

Section 12 – from the north via Owens Road, then Jump Off Joe Road.

Section 16 – from the northwest via Highway 395, then highway 397, then Nine Mile Canyon Road, then Lower Blair Road.

b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The DNR sites are not served by transit. The nearest transit stop is about three (3) miles due north of the property, but is about five (5) miles by road.

c. How many parking spaces would the completed project have? How many would the project eliminate?

There would be no prescribed parking spaces. Construction workers would park in roadways and turnaround areas. Maintenance crews will park in the pullout area at the base of the wind turbine located on DNR properties.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

As discussed in item A.11, construction and maintenance of the wind turbines will require construction of one-land gravel roads along the turbine strings. For the proposed 32-MWe Phase III project, approximately 3 miles of road are needed. Existing roads developed for the Phase I & II project will be used to the extent possible. To accommodate the erection cranes, roads will need to be about twenty (20) feet wide. New and improved roads will be available for use by property owners engaged in farming.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

These transportation modes do not occur in the vicinity and are not planned for delivery of construction materials.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Transportation impacts relating to the DNR properties would be greatest during the construction phase of the project. Construction equipment and materials will need to be transported to the site over a six to eight month period. The types of equipment and vehicle trips anticipated for construction of the Phase III (32-MWe) expansion will be comparable to what was experienced during construction of Phase III. The construction traffic should be of shorter duration and less intensive than was experienced during the 37-turbine Phase I project. Traffic associated with site construction (earthwork and tower foundations) is separated from traffic related to tower erection because these activities will not occur contemporaneously. The estimated average daily traffic (ADT) volume for site constriction is 55. Peak traffic will approach 80 ADT. These estimates are conservative in that they assume that all gravel and concrete is hauled to the project site. Should the construction

contractor choose to establish a gravel source near the site and use an onsite concrete batch plant, the construction-related trips would be substantially reduced. Traffic peaks will occur in the morning (6:30 a.m. - 8:00 a.m.) and afternoon (3:00 p.m. - 5:00 p.m.).

Traffic to support operation and maintenance of the project will average two to four trips per day by light duty vehicles. Although several routes are available, most traffic will be via the existing Nine Canyon project roads off of Nine Canyon road as the base of operations.

Project-related traffic on local roads does not represent a significant increase over existing conditions. Counts taken in 1994 on Finley Road, another rural road in the project vicinity, showed counts of 31 to 46 ADT. Traffic on Haney Road would be expected to be equivalent to Finley Road.

g. Proposed measures to reduce or control transportation impacts, if any:

Contract specifications will require that construction traffic be confined to routes that minimize disruptions to local traffic, particularly at crop harvest time. County and private roads that might be damaged by construction traffic would be restored to the preconstruction condition.

#### 15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The project should not result in incremental demands for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

#### 16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Telephone and electricity services are available to the DNR property in section 12 and to the Phase III project area.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

A short 115-kV power line to export the electric energy generated on the DNR properties. For the Phase III project area, as identified in items A.7 and A.11, the project may require

the construction of a substation and additional short 115-kV power lines to export the electric energy generated by the project.

#### C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Marca Bohart by mot

Review
Milton D. Johnston

Title: Assistant Region Manager

Date: 12-1-06

# D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(Do not use this sheet for project action)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Unlikely. There will be no discharges to groundwater. Air emissions during construction will be minor. There will be no emissions during project operations except for infrequent vehicular traffic. No toxic or hazardous substances. Project noise will be minimal.

Proposed measures to avoid or reduce such increases are:

No discharges to groundwater. The primary method that will be employed to control fugitive dust will be the application of water to areas vulnerable to wind erosion during the construction phase. Dust from the rock crusher operation will be controlled with water sprays. If used, the portable concrete batch plant would be equipped with dust collecting filter bags. No specific noise mitigation measures are planned. In instances of off-normal noise that can be attributed to mechanical failures (e.g., faulty gears, worn blade brakes, out-of-balance rotor), the turbine will be removed from service and repaired.

2. How would the proposal be likely to affect plants, animals, fish or marine life?

Unlikely. The DNR properties are currently farmed for dry-land cereal grains. The wind turbine and access road "foot-print" areas will be removed from cropland production. No listed or endangered species are known to be on the DNR sites. There are no surface water bodies in the project construction area.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

None.

3. How would the proposal be likely to deplete energy or natural resources?

The project will be a net generator of electrical energy, however during construction equipment would use gasoline and diesel fuel.

Proposed measures to protect or conserve energy and natural resources are:

None.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designed (or eligible or under study) for governmental protection: such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

None.

Proposed measures to protect such resources or to avoid or reduce impacts are:

None.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The project requires a conditional use permit from Benton County Planning Dept. for the construction and operation of the wind turbines.

Proposed measures to avoid or reduce shoreline and land use impacts are:

The project allows for multiple land uses that don't conflict with wind power generation, such as dry-land crop production.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Road use will increase during the construction phase of the project. The project will not use public transportation or result in incremental demands for public services. Utilities will be a short 115-kV power line to export electric energy generated by the project.

Proposed measures to reduce or respond to such demand(s) are:

Contract specifications will require that construction traffic be confined to routes that minimize disruptions to local traffic, particularly at crop harvest time. County and private roads that might be damaged by construction traffic would be restored to the preconstruction condition.

7. Identify, if possible, whether the proposal my conflict with local, state, or federal laws or requirements for the protection of the environment.

Prior to construction, Energy Northwest will be required to obtain a conditional use permit and building permit from the Benton County Planning Department that meets Benton County building requirements.